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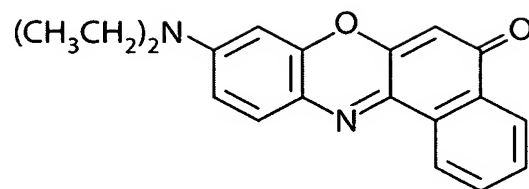


Fig. 1A

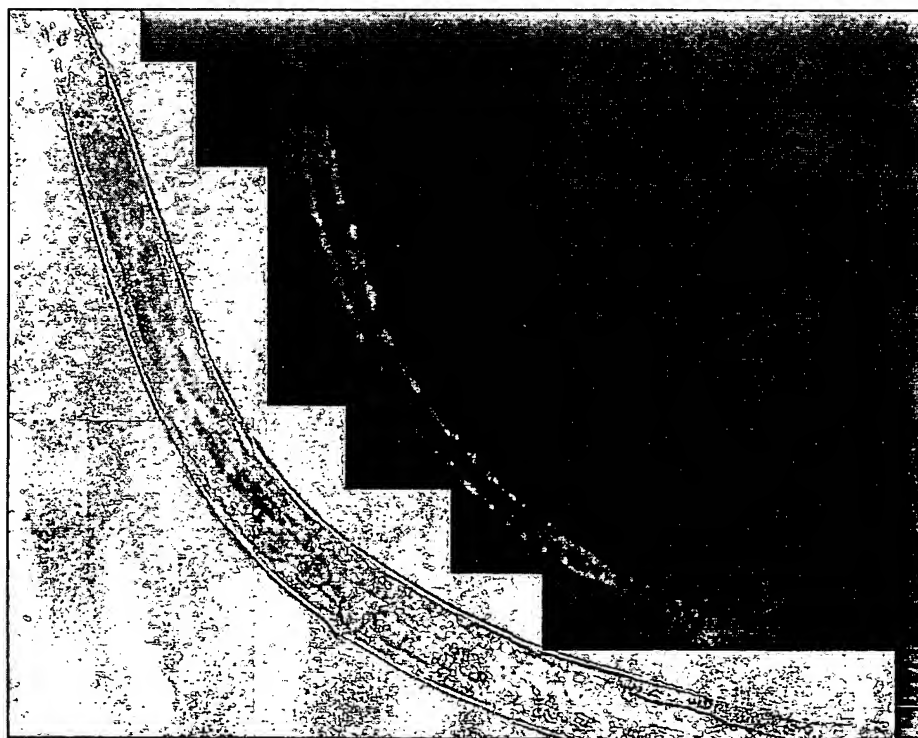


Fig. 1B

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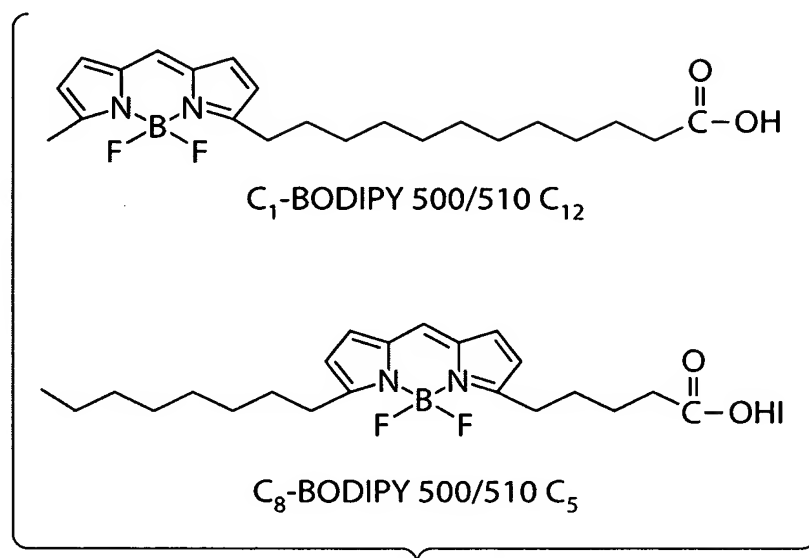


Fig. 2A

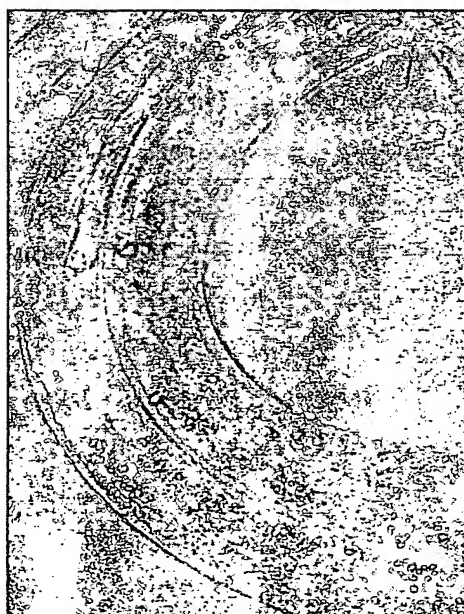


Fig. 2B

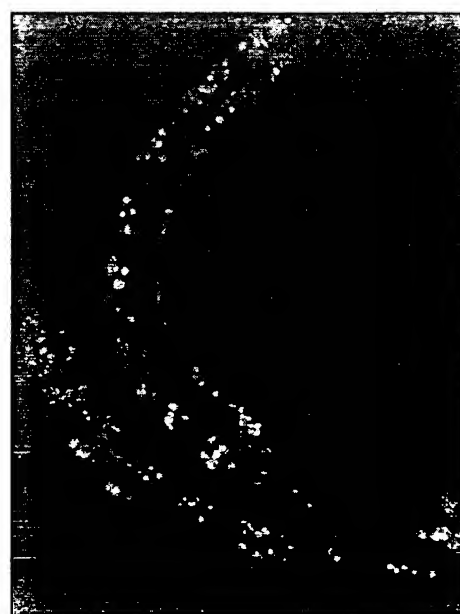


Fig. 2C



Fig. 2D

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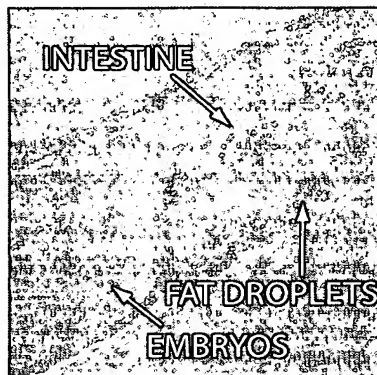


Fig. 3A

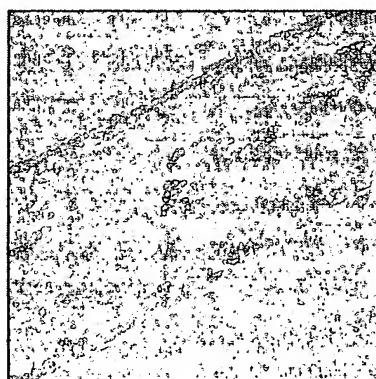


Fig. 3B

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Fig. 4A



Fig. 4B

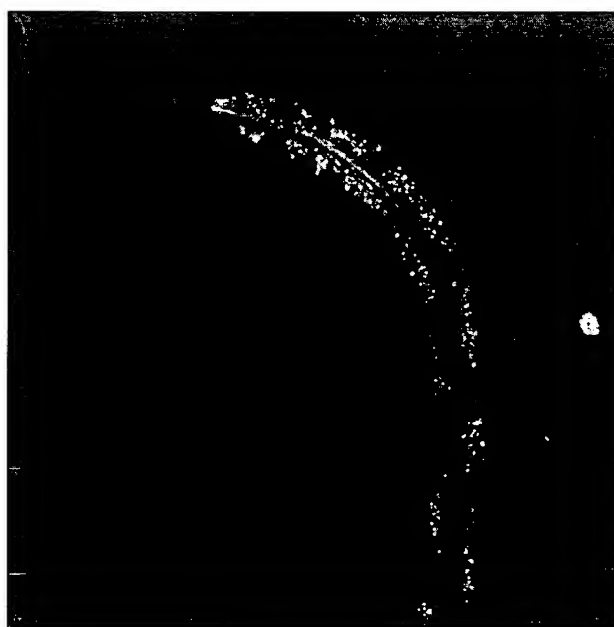


Fig. 4C

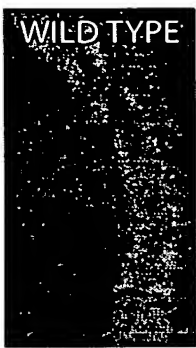


Fig. 5A



Fig. 5B



Fig. 5C

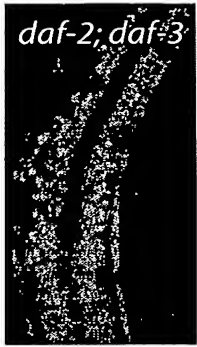


Fig. 5D

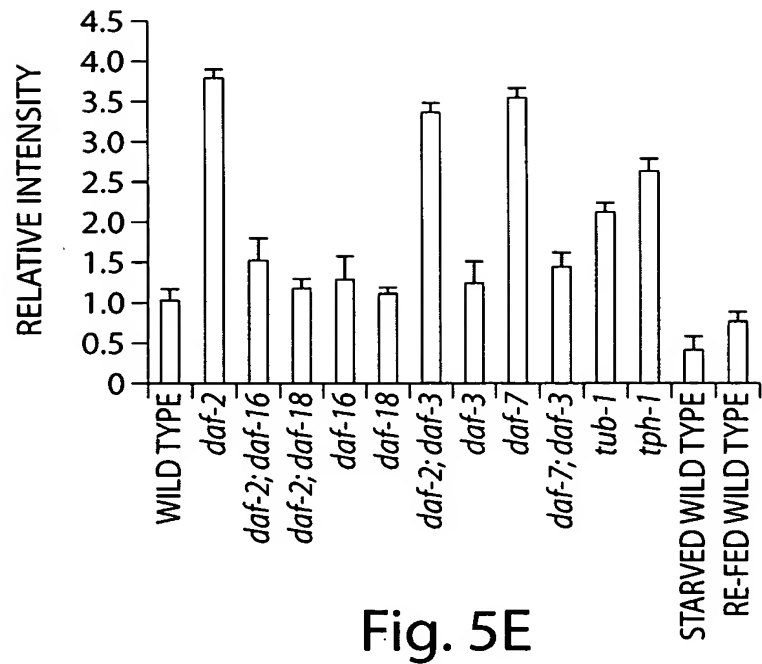


Fig. 5E

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Fig. 6A



Fig. 6B

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Fig. 6C

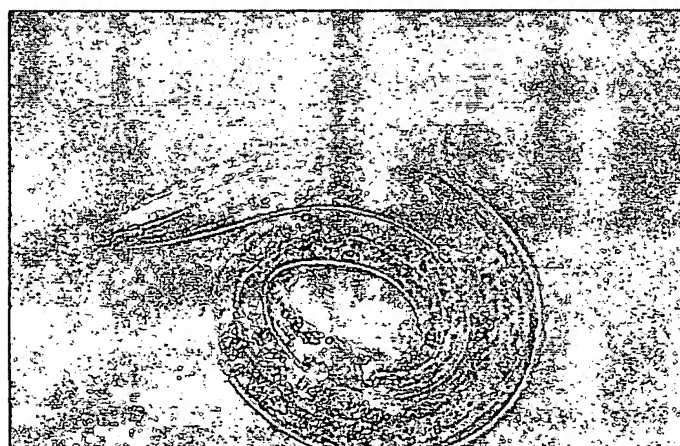


Fig. 6D

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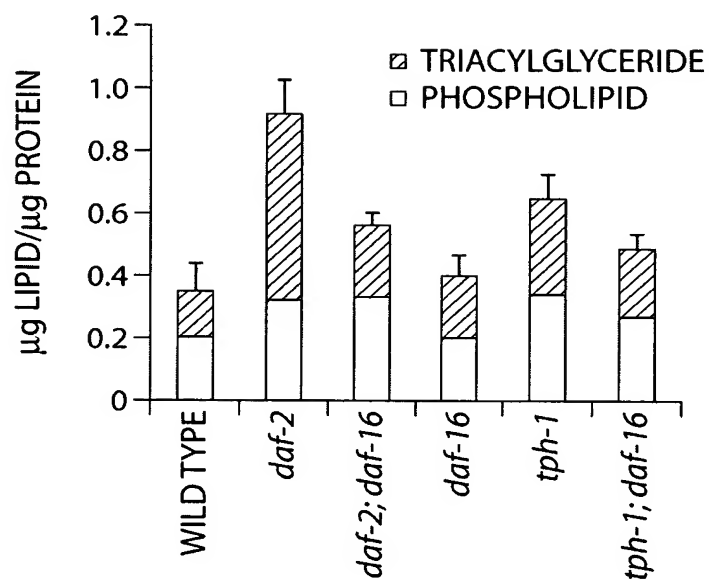
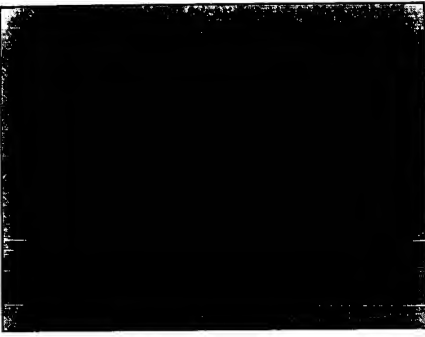


Fig. 7

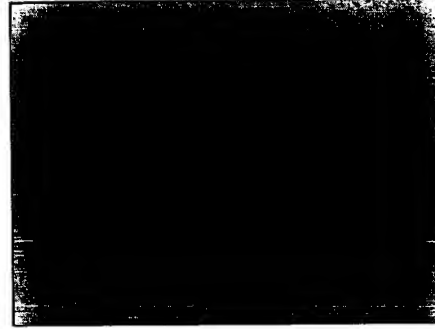
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WILD TYPE

STARVED

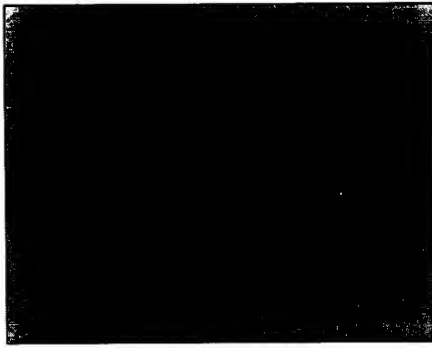
Fig. 8C



daf-2(e1370)

STARVED

Fig. 8F



WILD TYPE

AICAR

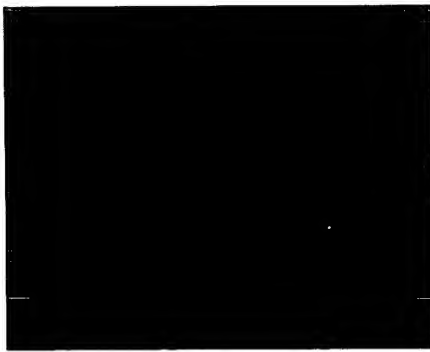
Fig. 8B



daf-2(e1370)

AICAR

Fig. 8E



WILD TYPE

Fig. 8A



daf-2(e1370)

Fig. 8D

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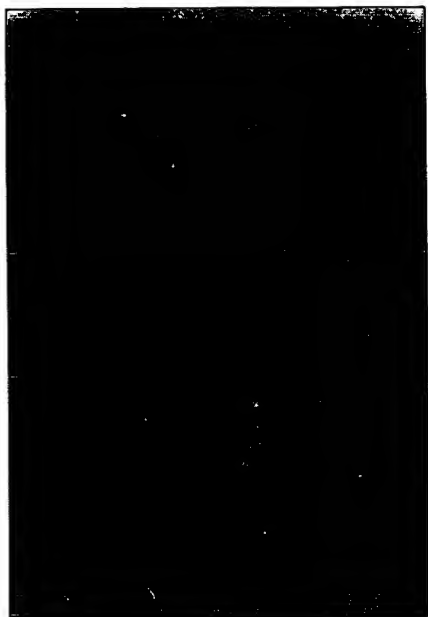


Fig. 9A

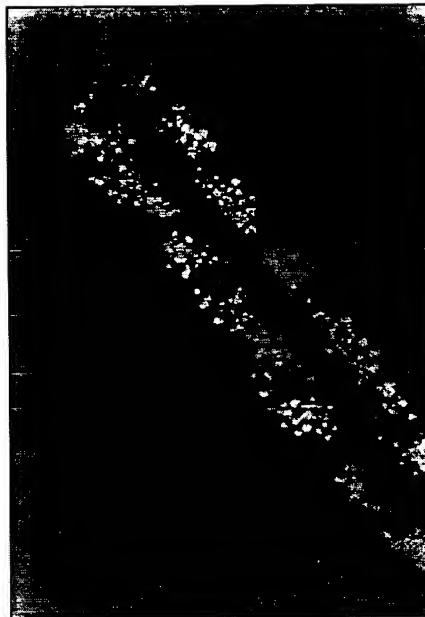


Fig. 9B

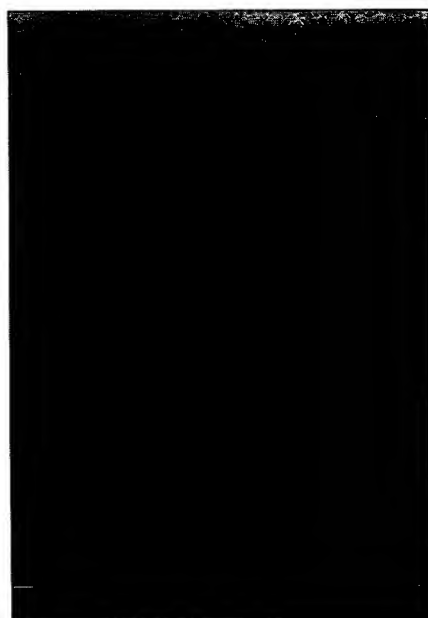


Fig. 9C



Fig. 9D

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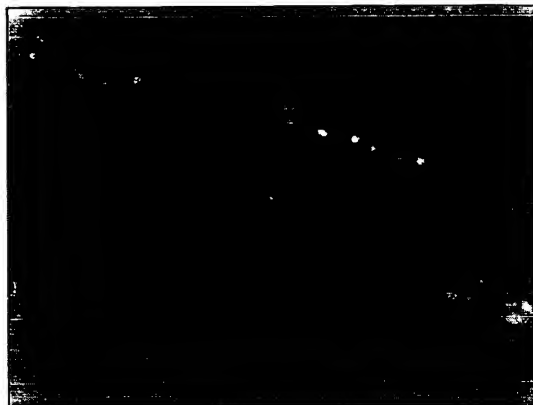


Fig. 9E

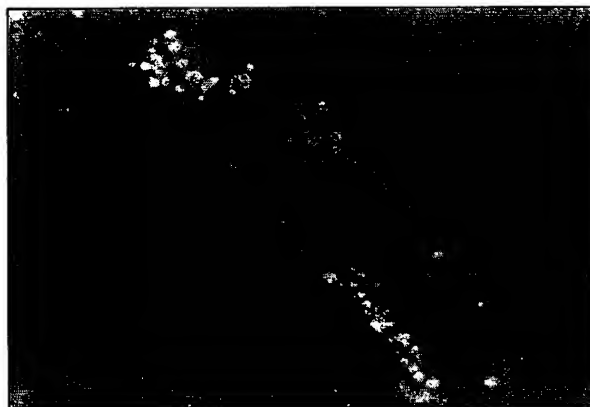


Fig. 9F



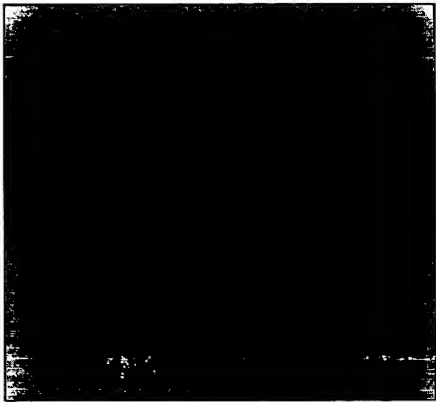
Fig. 9G



C12-BODIPY

lpo-2

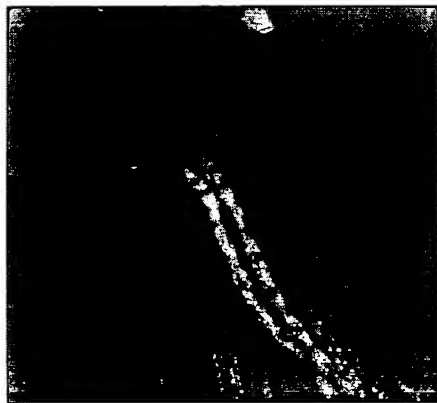
Fig. 10E



NILE RED

lpo-2

Fig. 10F



C12-BODIPY

lpo-1

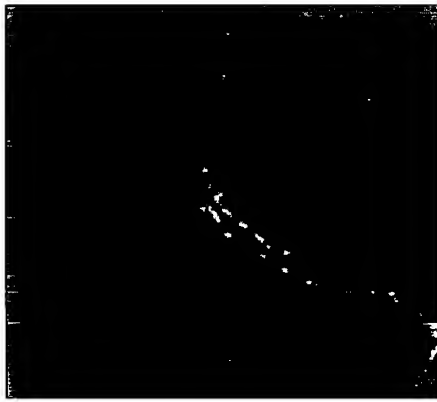
Fig. 10C



NILE RED

lpo-1

Fig. 10D



C12-BODIPY

WILD TYPE

Fig. 10A



NILE RED

WILD TYPE

Fig. 10B

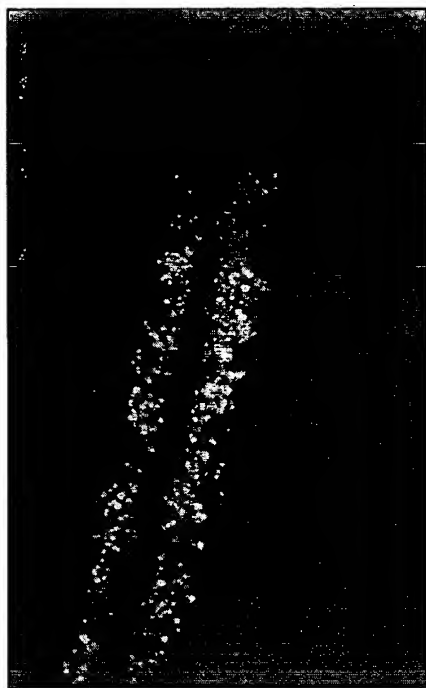


Fig. 11A



Fig. 11B

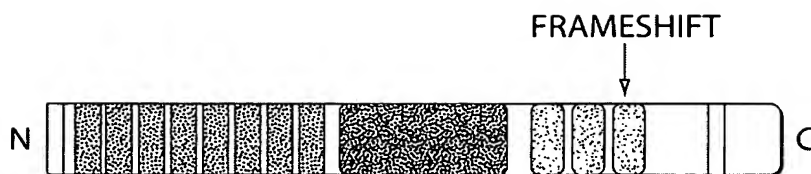


Fig. 11C

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SEQ ID NO:1

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Fig. 11D

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Fig. 11D Cont.

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Fig. 11E

LPO-1
SEQ ID NO:3

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	QKGTEYECPS	TPLQCIEMSK	LCASAQFDCG	DGNMSVCSQK	KIIEMCKPSS	EGCVCRPSFV	RGNNVCHCKD
10	GYKLENGQCI	DINECEIAGV	CDQICLNIPG	SYRCACHAGY	QISFGDTKIG	SGRIANKCRA	MGDPLVLLT
	NRHTIRQFDL	VNKMHPVSS	SPGSAVAMDF	HILNGTLIWS	DVLSKQILKC	SIGNVSNAFL	GTDMCDKKHE
	IVLTGDKIHT	PDGLAVDWVH	DLLFWDGGL	DQINVLDMKN	GKQRVLYSSD	LEEPRAIAVD	PEVGLIFWTD
	WGKKARIERS	GMDGQHRTVI	VEGDRVVPWN	GLALDYVDKR	VYWLMPRSSQ	SSVFTGADIR	TVMDQVKSPM
	TVRIYHKQAQ	PLMQNKCENS	ECDHLCLPRA	VYREKERVHE	KTWHDRPFSC	ACEGTTASDV	LECFADLETK
15	SGISMFTIFL	LLCVGGVVAA	GFVIVRRKMG	PRTFTALNFD	NPIYRRTTEE	ADHQMEDPFR	DPFAEPRNGR
	GRNDGLPTLA	SADNETRADA	LSF				

Fig. 11F

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	RAT	MGTSARWALWLLALCWAPRDSGATASGKKAKCDSSQFQCTNGRCITLLWKCDGDEDCD	60	(SEQ ID NO:10)
	human	MGTSALWALWLLALCWAPRESGATGTGRKAKCEPSQFQCTNGRCITLLWKCDGDEDCD	60	(SEQ ID NO:9)
5	lpo-1	MRTCLTLTGFLISMATISVGLQPMGAPTRKCDATNSFQCQDGRICIPMSWRCDGDIDCQN	60	(SEQ ID NO:3)
		* * . : **: : . . . : : ...** :****: *:**** * :		
	RAT	GSDEKNCVKKTCAESDFVCKNG-----QCVPNRWQCDGDPDCEDGSDESPEQCHMR	111	
	human	GSDEKNCVKKTCAESDFVCNNG-----QCVPSRWKCDGDPDCEDGSDESPEQCHMR	111	
10	lpo-1	EDEKNCVKVCGAEHKCGEVKSARSSLERFKCIPNKWVCDGEFDCEDKSDE--FQCKNV	118	
		.***** * ** . : : : . :*:*: * ****: **** * ** :		
	RAT	TCRINEISCGARS---TQCIPESWRCDGENDCDNGEDEENCGNIT--CSADEFCTSSGRC	166	
	human	TCRIHEISCGAHS---TQCIPVSWRCDGENDCDNGEDEENCGNIT--CSPDEFCTSSGRC	166	
15	lpo-1	SCQEKQFQCEELSGDYSLCIPETWVCDGQRDCTNGKDEQNCTSKTSKCPDNNFQCSNGNC	178	
		:* : : : * * . : *** : * ****: ** .*:** * . *: . : : * ** . *		
	RAT	VSRNFVCNGQDDCDDGSDELDCAPPTCG-----AHEFQCRTSSCIPLSWVCDDADC	218	
	human	ISRNFCVNGQDDCSDGSDELDCAPPTCG-----AHEFQCTSSCIPISWVCDDADC	218	
20	lpo-1	IFKNWVCDGEEDCSDGSDELDTAPSNCNRTVNCPPGEMWKCGSEGCIPSRWRCDAEVDC	238	
		: :*:**:*:***.***** ** . . : : * : ..*** * ** : **		
	RAT	SDQSDESLEQCGRQPVHTKCPSTSEIQCGSGE-CIHKKWRCDGDPDCKDGSDEVNCPSPR-	276	
	human	SDQSDESLEQCGRQPVHTKCPASEIQCGSGE-CIHKKWRCDGDPDCKDGSDEVNCPSPR-	276	
25	lpo-1	KDHSDE---KNCTAIQHTCKLAEEFACKASHNCINKAFVCDGELDCSDGSDEDDCADVR	294	
		.*:*** . . : ** :*: * :...**:* : ****: **.***** :* .		
	RAT	-TCRPDQFECEDGS-----CIHGSRCNGIRDCVDGSDEVNCKNVN--QCLGPG	322	
	human	-TCRPDQFECEDGS-----CIHGSRCNGIRDCVDGSDEVNCKNVN--QCLGPG	322	
30	lpo-1	TECKSGERTCPASYGAYGAESGHVVCIPASSWCNGEEDCPDGDGEKECNMTAPVTCQKGT	354	
		: * : : : * . . : : : . ** . * *** .** ** :* : . . *		
	RAT	KFKCRSG--ECIDITKVCD-QEQDCRDWSDEPLKECHINECLVNNGGCSHICKDLVIG-Y	378	
	human	KFKCRSG--ECIDISKVCN-QEQDCRDWSDEPLKECHINECLVNNGGCSHICKDLVIG-Y	378	
35	lpo-1	EYECPTPLQCIEMSKLCSAQFDCDGNMSVCSQKKIEMCKPSSEGCVCPRPSFVRGNN	414	
		: : * * . :*:**:* : : ** * . . : : * * . . . : * *		
	RAT	ECDCAAGFELIDRKTCDGIDECQNPICISQICINLKGGYKCECSRGYQMDLATG-----	432	
	human	ECDCAAGFELIDRKTCDGIDECQNPICISQICINLKGGYKCECSRGYQMDLATG-----	432	
40	lpo-1	VCHCKDGYKLEN-GQCIDINECEIAGVCDQICLNIPGSYRCACHAGYQISFGDTKIGSGR	473	
		*. * *: : : * ****: .*:*.****: *.*: * * ****: . : . . .		
	RAT	---VCKAVGKEPSLIFTNRRDIRKIGLERKEYIQLVEQLRNTVALDADIAAQKLFWADLS	489	
	human	---VCKAVGKEPSLIFTNRRDIRKIGLERKEYIQLVEQLRNTVALDADIAAQKLFWADLS	489	
45	lpo-1	IANKCRAMGGDPLVLLTNRHTIRQFDLVNKMHPVSSSPGSAVAMDFHILNGTLIWSVDL	533	
		: . *:**:* : * :*:**: ** : * . : : . . :*:** * . :*:**:		
	RAT	QKAIFSASID-----DKVGRHFKMIDNVYNPAIAVDWVYKTIYWTDAASKTI	537	
	human	QKAIFSASID-----DKVGRHVKMIDNVYNPAIAVDWVYKTIYWTDAASKTI	537	
50	lpo-1	SKQILKCSIGNVSNAFLGTMCDKKHEIVLTGDKIHTPDGLAVDWVHDLFWTDGGLDQI	593	
		. * * :..** . : : . . ** . . * : : * . :****: . :****. . *		

Fig. 11G

```

      RAT          YLKTTEEDLSIDIG-----RHSASVGHTYPAISVVSTDDDLA---- 873
      human        YLKTTEEDLSIDIG-----RHSASVGHTYPAISVVSTDDDLA---- 873
30    lpo-1        YRRTTEEADHQMEDPFRDPFAEPRNGRGRNDGLPTLASADNETRADALSF 863
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Fig. 11G Cont.

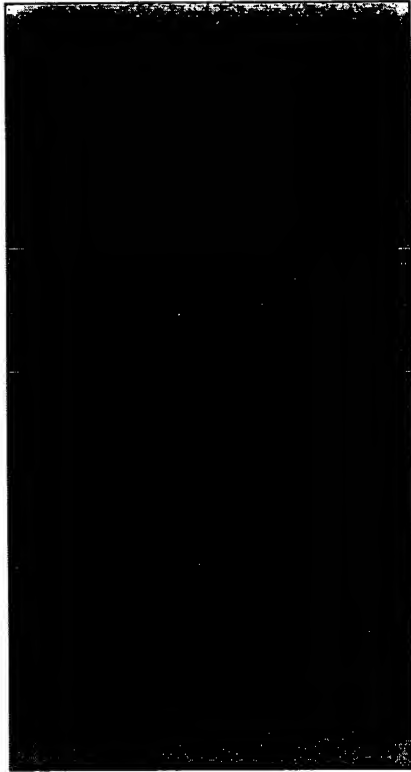


Fig. 12A

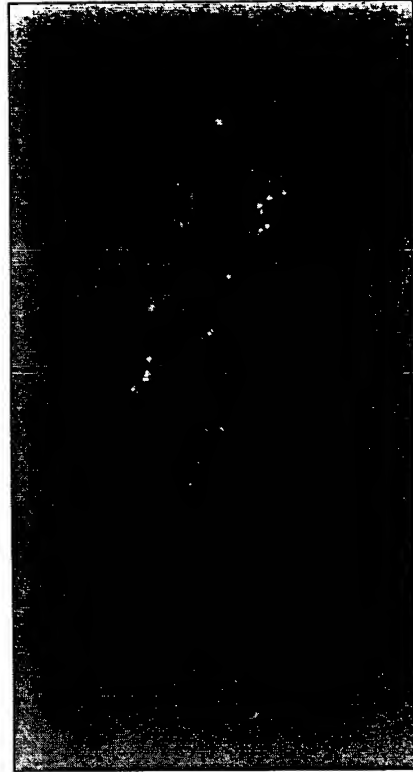
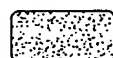
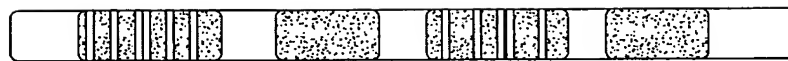


Fig. 12B



ABC TRANSPORTER REGION



TRANSMEMBRANE REGION

Fig. 12C

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LPO-3 Unspliced DNA (7496 bp)
SEQ ID NO:4

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    catatcactt cgtctgtctg cgtctctatc actttattat cttcaatata ccacattatc tcggttggcc
    tggaaacctt tcagtcggtt tttcttaaaa ctattcatcg tcagcaacct cgtcatctta aaaaattaga
    aaaattggaa gaaaaaagag aaataaaaaa ggggtggagc ctagacacct tcaacacata tttttaatta
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    GTTAAATCA CAAATTATGG GATATTCTAT TACACTCAAG GAGTTGATCT ACTTCTTTTA ATTACTGGAA
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    ctaaatccccc ggaagatcac taaagatatt gcaaataata aatcatcggt aatcttttta ttgcagCGAT
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40  GTCGCTGGTG CAATTGCAGA AGAAACATTC TCTTCGATTA GAACAGTTCA TTCATTAAAT GGACATAAAA
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```

Fig. 12D

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	GGAAATATTG	TTGAATCTGG	AAGTCATGAG	GAATTAATGA	GCAAACAAGG	AATCTTCTAC	GATATGACAC
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55

Fig. 12D Cont.

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lpo-3
SEQ ID NO:5

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	tcgtagctca	ccgattgagc	acaattcgaa	atgttgacag	aatattcgtg	ttcaaagctg	gaaatattgt
30	tgaatctgga	agtcatgagg	aattaatgag	caaacaagga	atcttctacg	atatgacaca	ggctcaagtt
	gttcgacaac	agcaacagga	agcaggaaaa	gatattgaag	acactatttc	tgagtcagct	cattcccatc
	tcagcagaaa	gtcttccaca	agaagtgcc	tttcaattgc	aacatctatt	catcagctcg	ctgaggaggt
	tgaggaatgc	aaggctccac	ccacctcaat	gttcaaaaata	ttcaaattca	acggagacaa	agtcggatgg
	tttattgggtg	gaatttttgg	agcattttatt	tttggatcag	ttactccagt	ttttgctctt	gtatatgctg
35	aaattttcaa	tgtatactct	ttgccagctg	atcaaatgca	agcaaatgtg	tatttctggt	gtggaatggt
	tgttcttatg	ggaatcactt	tcttcggttg	attcttccact	tctgcaaatt	gcctcggacg	atgtggagag
	tcaactgacaa	tgaagttgag	atttgaagca	ttcaagaatt	tattaagaca	agatatcgct	ttttatgatg
	atttgagaca	tggaaactgga	aaattgtgca	caagatttgc	aactgatgct	ccgaatgttc	gatattgtatt
	cacaagactt	ccagttggtt	tagcatcaat	tgtgactatt	tgtggagctc	tggaatttgg	attctattac
40	ggatggcaac	ttgccttgat	tcttgcgta	atggtttccac	tacttgtaat	gggaggatat	ttcgaaatgc
	aaatgagatt	tggaaaacaa	ataagagata	ctcaattggt	ggaagaagct	ggaaaagtag	cttcacaggc
	tgttgaacac	attcgaacag	ttcatagtgt	aaatcgtcag	gaacaatttc	atttcacata	ctgtgaatat
	cttcgggaac	cattcaatac	taatctgaaa	catgcacata	catatggagc	tgtatttgca	ttctctcaat
	ctcttatttt	cttcatgtat	gctgctgcat	tctatcttgg	aagtattttt	gtaaatacaac	aagctatgca
45	accaattgat	gtctatcgag	tattctttgc	tatttcattc	tgtggacaaa	tgattggaaa	tactacatct
	tttattcctg	atgtcgtaaa	agctcgtctt	gctgcttctc	ttttgttcta	tcttattgaa	catccaacac
	ctattgattc	tctatctgat	agtggaattg	tgaagccgat	aactggaaat	atttcaatca	gaaatgtatt
	tttcaattat	ccaacaagaa	aggataccaa	ggttttacaa	ggattcactc	ttgatatacaa	agccggtaaa
	actggtgcac	ttgtcgggca	ctcaggatgt	ggaaaatcta	caattatggg	atgctggag	agattctata
50	atcaagataa	aggaatgatt	atgattgatg	gtgataacat	ccgtaacctc	aacatcaggt	cacttcgcga
	acaagtatgt	attgtaagtc	aagagccaac	gtgtgttgat	tgcacaattg	gagaaaaatat	ttgctacgga
	acaaatcgaa	atgttacata	tcaagaaatt	gttgaagctg	ccaaaatggc	aaatattcac	aatttcatct
	taggattgcc	agatggttat	gatactcatg	tcggagagaa	aggaactcaa	ctttcgggtg	gtcaaaaaca
	aagaattgcc	attgcacggg	cacttggttcg	atctccttct	gttttacttt	tggatgaagc	aactagtgca
55	ttagatacgg	aaagtgaaaa	gattgtacaa	gaagcattgg	acgcgcgcaa	acaaggtcgc	acgtgtcttg
	tcattgtctc	tcggttgagc	acaattcaaaa	atagtgcagt	cattgcatc	gtcagtgagg	gtaaaattgt
	ggaaaaggga	acacatgacg	agttgataag	gaagagtga	atatatcaga	aattctgtga	aacgcagagg
	attgtcgaaa	gtcaataa					

Fig. 12E

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LPO-3
SEQ ID NO:6

	MKSRKNEPTW	VTKPLLKRSH	SSDSSIDEST	VKLTNYGIFY	YTQGVLLLLL	ITGTVAAVIH	GAGFPLLAIV
5	LGGMTTVFLR	AQNSDFVGV	DNVNPEGLVP	ISLDEFNSEV	VKYCIYYLVL	GVLMMFFTSYV	QIACFESYAE
	RLVHKLRQNY	LKAILRQQIQ	WFDKQQTGNL	TARLTDDLER	VERGLGDKFA	LLVQMFAAFL	AGYGVGFFYS
	WSMTLVMMGF	APLIVLSGAK	MSKSMATRTR	VEQETYAVAG	AIAEETFSSI	RTVHSLNGHK	RELDRLFYNAL
	EVGRQTGIVK	YCYMGIGVGF	SNLCMYSSYA	LAFWYGSTLI	INDPTFDRGL	IFTVFFAVLS	GSTSLGGALP
	HLASFGTARG	AASTVLRVIN	SHPKIDPYSL	EGILVDNMKG	DISFKDVHFR	YPSRKDIHVL	KGISLELKAG
10	DKIALVGSSG	CGKSTIVNLL	QRFYDPTKGR	VLIDGVDLRE	VNVHSLREQI	GIVSQEPVLF	DGTIYENIKM
	GNEHATHDQV	VEACKMANAN	DFIKRLPDGY	GTRVGEKGVQ	LSGGQKQRIA	IARALVKNPK	ILLLDEATSA
	LDTEAEREVQ	GALDQAQAGR	TTIIVAHRLS	TIRNVDRIFV	FKAGNIVESG	SHEELMSKQG	IFYDMTQAQV
	VRQQQQEAGK	DIEDTISESA	HSLSRKSST	RSAISIATSI	HQLAEVEVEC	KAPPTSMFKI	FKFNGDKVGW
	FIGGIFGAFI	FGSVTPVFAL	VYAEIFNVYS	LPADQMQUANV	YFWCGMFVLM	GITFFVGFFT	SANCLGRCGE
15	SLTMKLRFEA	FKNLLRQDIA	FYDDL RHGTG	KLCTRFATDA	PNVRYVFTRL	PVVLASIVTI	CGALGIGFYY
	GWQLALILVV	MVPLLVMGGY	FEMQMRFGKQ	IRDTQLLEEA	GKVASQAVEH	IRTVHSLNRQ	EQFHFTYCEY
	LREPFNTNLK	HAHTYGAVFA	FSQSLIFFMY	AAAFYLGSI	VNQQAMQPID	VYRVFFAISF	CGQMIGNTTT
	FIPDVVKARL	AASLLFYLI	HPTPIDSLSD	SGIVKPITGN	ISIRNVFFNY	PTRKDTKVLQ	GFTLDIKAGK
	TVALVGHSGC	GKSTIMGLLE	RFYNQDKGMI	MIDGDNIRNL	NISSLREQVC	IVSQEPTLFD	CTIGENICYG
20	TNRNVTYQEI	VEAAKMANIH	NFILGLPDGY	DTHVGEKGTQ	LSGGQKQRIA	IARALVRSPS	VLLLDEATSA
	LDTESEKIVQ	EALDAAKQGR	TCLVIAHRLS	TIQNSDVIAI	VSEKIVEKEG	THDELIRKSE	IYQKFCETQR
	IVESQ						

Fig. 12F

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5	human MOUSE LPO-3	MDLEGDRNGGAKKKNFFKLNKSEKDKKEKKPTVSFVSMFRYSNWLDKLYMVVGTAAII 60 MEFEENLKGADK-NFSKMGKSKKEKKEKPAVGVMFRYADWLDKLCMILGTAAII 59 MKSARKNEPTWVK-PLLKRSHSSDSSIDESTVKLTNYGIFYYTQGVLLLLITGTVAIVI 59 * . . : . * . : * . . * . . . * . . : : * * : : * * : : * * : : *	SEQ ID NO:11 SEQ ID NO:12 SEQ ID NO:6
10	human MOUSE LPO-3	HGAGLPLMMLVFGEMTDIFANAGNLEDLMSNITNRSNDINDTGFFMN--LEEDMTRYAYYY 118 HGTLLPLMLVFGNMTDSFTKA--EASILPSITNQSGPNSTLIISNSSLEEEMAIYAYYY 117 HGAGFPLLAIVLGGMTTVFLRAQ-NSDFVVGVDN-VNPEGLVPISLDEFNSEVVKYCIYY 117 ** : ** : * : * * * * . * . . : : * . . : : : : . * . **	
15	human MOUSE LPO-3	SGIGAGVLVAAYIQVSFWCLAAGRQIHKIRKQFFHAIMRQEIGWFDVHDVGELNTRLTDD 178 TGIGAGVLIVAYIQVSLWCLAAGRQIHKIRKQFFHAIMNQEIGWFDVHDVGELNTRLTDD 177 LVLGVLMMFTSYVQIACFESYAEERLVHKLRLQNYLKAILRQIQWFDKQQTGNLTARLTDD 177 : * . : : : : * : : : : * * : * : * : : * : * : * : * : * : * : * : * : *	
20	human MOUSE LPO-3	VSKINEGIGDKIGMFFQSMATFFTGFIVGFTRGWKLTLVILAI SPVLGLSAAVWAKILSS 238 VSKINDGIGDKIGMFFQSITTFLAGFIIGFISGWKLTLVILAVSPLIGLSSALWAKVLTS 237 LERVREGLGDKFALLVQMAFAFLAGYGVGFFYSWSMTLVMGFAPLIVLSGAKMSKSMAT 237 : : : : * : * : : : * : : : : * : * : * : * : : * : * : * : * : *	
25	human MOUSE LPO-3	FTDKELLAYAKAGAVAEVLAIRTVIAFGGQKKELERYNKNLEEAKRIGIKKAITANIS 298 FTNKELQAYAKAGAVAEVLAIRTVIAFGGQKKELERYNKNLEEAKNVGIKKAITASIS 297 RTRVEQETYAVAGAI AEETFSIRTVHSLNGHKRELDRLFYNALREVGRQTGIVKYCYMGIG 297 * * : * * : * * : * * : * * : * * : * * : * * : * * : * *	
30	human MOUSE LPO-3	IGAAFLLIYASYALAFWYGTTLVLSG-EYSIGQVLTFFSVLIGAFSVGQASPSIEAFAN 357 IGIAYLLVYASYALAFWYGTSLVLSN-EYSIGEVLTVFFSILLGTFSIGHLAPNIEAFAN 356 VGFSNLCMYSSYALAFWYGSTLIINDPTFDRGLIFTVFFAVLSGSTSLGGALPHLASFGT 357 : * : * : * : * : * : * : * : * : * : * : * : * : * : * : *	
35	human MOUSE LPO-3	ARGAAYEIFKI IDNKPSIDSYSGHKKPDNIKGNLEFRNVHFSYPSRKEVKILKGLNLKV 417 ARGAAFEIFKI IDNEPSIDSFSTKGYKPSIMGNLEFKNVHFNYPSPRSEVQILKGLNLKV 416 ARGAASTVLRVINSHPKIDPYSLEGILVDNMKGDISFKDVHFRYPSRKDIHVLKGISLEL 417 ***** : : : * : * . * . * . * : * : * : * : * : * : * : * : *	
40	human MOUSE LPO-3	QSGQTVALVGNSSGCGKSTTVQLMQRLYDPTGEMVSVGDQDIRTINVRFLREIIGVVSQEP 477 KSGQTVALVGNSSGCGKSTTVQLMQRLYDPLEGVVSDGQDIRTINVRFLREIIGVVSQEP 476 KAGDKIALVGNSSGCGKSTIVNLLQRFYDPTKGRVLIDGVDLRENVVHSLREQIGIVSQEP 477 : : * : : * : * : * : * : * : * : * : * : * : * : * : *	
45	human MOUSE LPO-3	VLFATTIAENIRYGRENVMTDEIEKAVKEANAYDFIMKLPKFDTLVGERGAQLSGGQKQ 537 VLFATTIAENIRYGRENVMTDEIEKAVKEANAYDFIMKLPKFDTLVGERGAQLSGGQKQ 536 VLFDTIYENIKMGNEHATHDQVVEACKMANANDFIKRLPDGYGTRVGEKGVQLSGGQKQ 537 *** ** * : * . . * : : * * * * * : * . : * * : * . * : * : *	
50	human MOUSE LPO-3	RIAIARALVRNPKILLDEATSALDTESEAVVQVALDKARKGRTTIVIAHRLSTVRNADV 597 RIAIARALVRNPKILLDEATSALDTESEAVVQAALDKAREGRTTIVIAHRLSTVRNADV 596 RIAIARALVRNPKILLDEATSALDTEAEREVQALDQAQAGRTTIVIAHRLSTVRNADV 597 ***** : * * * : * : * : * : * : * : * : * : * : *	
55	human MOUSE LPO-3	IAGFDDGVIVEKGNHDELMKEKGIYFKLVTMTAGNEVELENAADESKSEIDALEMSSND 657 IAGFDGGVIVEQGNHDELMREKGIYFKLVTMTQTRGNEIEPGNNAYGSQSDTDASELTSEE 656 IFVFKAGNIVESGSHEELMSKQGIYFDMTQAQVVRQQQQ-----EAGKDIEDTISES 649 * * . * * * : * : * : * : * : * : * : * : * : *	

Fig. 12G

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5	human MOUSE LPO-3	SRSSLIRKSTRRSVRGSAQDRKLSTKEALDESIPVSVFWRIMKLNLTWPYFVVGVC 717 SKSPLIR-RSIYRSVHRKQDQERRLSMKEAVDEDVPLVSFWRILNLSWPHYLLVGVLC 715 AHSHLSRKSSTRSAIS--IATSIHQLAEEVEECKAPPTSMFKIFKFNQDKVGVFIGGIFG 707 ::* * * . * : : . : : * . : : * : : * : : * : : * : : * : :
10	human MOUSE LPO-3	AIINGGLQPAFAIIFSKIIGVFTRIDDPETKRQNSNLSLFLALGIISFITFFLQGFTF 777 AVINGCIQPVFAIVFSRIVGVFSRDDHETKRQNCNLSLFFLVMLGISFVTFYFQGFTF 775 AFIFGSVTPVFALVYAEIFNVYSLPAD--QMQANVYFWCGMFVLMGITFFVGFFTSANCL 765 * . * * : * . * : : : * . * : : * . * : : * . * : : * . * : : * . * : :
15	human MOUSE LPO-3	GKAGEILTKRLRYMVFRSMLRQDVSWFDDPKNTTGALTTRLANDAAQVKGAGSRLAVIT 837 GKAGEILTKRVRYMVFKSMLRQDISWFDHKNSTGSLTTRLASDASSVKGAMGARLAVVT 835 GRCGESLTMKLRFEAFKNLLRQDIAFYDDL RHGTGKLCRTRFATDAPNVR-YVFTRLPVVL 824 * : . * * * * : : * : . * : : * : : * : : * : : * : : * : : * : : * : :
20	human MOUSE LPO-3	QNIANLGTGIIISFIYQWQLTLLLLAIVPIIAIAGVEMKMLSGQALKDKKELEGAGKIA 897 QNVANLGTGVILSLVYGWQLTLLLVVIIPLIVLGGIIEKMLSGQALKDKKQLEISGKIA 895 ASIVTICGALGIGFYQWQLALILVVMVPLLVMGGYFEMQMRFGKQIRDTQLLEEAGKVA 884 . : . : . : : : * : : : * : : : * : : : * : : : * : : : * : : : * : : :
25	human MOUSE LPO-3	TEAIENFRTVVSILTQEQKFEHMYAQSQVQPYRNSLRKAHIFGITFSFTQAMMYFSYAGCF 957 TEAIENFRTIVSLTREQKFETMYAQSQVQPYRNAMKKAHVFGITFSFTQAMMYFSYAACF 955 SQAVEHIRTVHSLNRQEQHFHTYCEYLREPNTNLKHAHTYGAVFAFSQSLIFFMYAAAF 944 : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : :
30	human MOUSE LPO-3	RFGAYLVAHKLSFEDVLLVFSAVVFGAMAVGVSSFAPDYAKAKISAAHIIMIIEKTPL 1017 RFGAYLVAQQLMTFENVMLVFSAVVFGAMAAGNTSSFAPDYAKAKVSASHIIRIIEKTPE 1015 YLGSI FVNQQAMQPIDVYRVFFAISFCGQMIGNTTSFIPDVVKARLAASLLFYLIEHPTP 1004 : * : * : : * : * * * : * . * : : * * * * . * : : * : : * : : * : : :
35	human MOUSE LPO-3	IDSYSTEGMLPNTLEGNTVFGEVFNYPTRPDIPVLQGLSLEVKKGQTLALVGSSGCGKS 1077 IDSYSTEGLKPTLLEGNVKNFNGVQFNYPTRPNIPVLQGLSLEVKKGQTLALVGSSGCGKS 1075 IDSLSDSGIVK-PITGNISIRNVFNYPTRKDTKVLQGFSLDIKAGKTVALVGHSGCGKS 1063 * * * * . * : . : * : : : * * * * * : * * * : : * : : * : : * : : * : :
40	human MOUSE LPO-3	TVVQLLERFYDPLAGKVLDDGKEIKRLNVQWLRHLGIVSQEPILFDCSIAENIAYGDNS 1137 TVVQLLERFYDPMAGSVFLDGKEIKQLNVQWLRHLGIVSQEPILFDCSIAENIAYGDNS 1135 TIMGLLERFYNQDKGMIMIDGNIRNLNLISSLRQVCIVSQEPTLFDCTIGENICYGTN- 1122 * : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : :
45	human MOUSE LPO-3	RVVSQEEIVRAAKEANIHFIESLPNKYSTKVGDKGTQLSGGQKQRIAIARALVRQPHIL 1197 RAVSHEEIVRAAKEANIHFIDSLPDKNTRVGDGTQLSGGQKQRIAIARALVRQPHIL 1195 RNVTYQEIVEAAKMANIHNFILGLPDGYDTHVGEKGTQLSGGQKQRIAIARALVRSPSVL 1182 * * : : * : . * * * * * * * . * : . * : * : : * : : * : : * : : * : : * : :
50	human MOUSE LPO-3	LLDEATSALDTESEKVVQEALDKAREGRTCIVIAHRLSTIQNADLIVVFQNGRVKEHGTH 1257 LLDEATSALDTESEKVVQEALDKAREGRTCIVIAHRLSTIQNADLIVVIENGKVKEHGTH 1255 LLDEATSALDTESEKIVQEALDAKQGRCLVIAHRLSTIQNSDVIAIVSEKIVEKEGTH 1242 * : : : * : : : * : : * : : * : : * : : * : : * : : * : : * : : * : : * : :
55	human MOUSE LPO-3	QQLLAQKGIYFSMVSQAGTKRQ 1280 QQLLAQKGIYFSMV--QAGAKRS 1276 DELIRKSEIYQKFCETQRIVESQ 1265 : : * : . :

Fig. 12G Cont.

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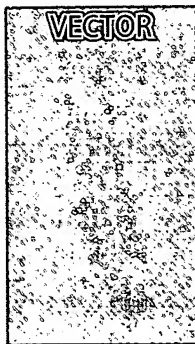


Fig. 13A



Fig. 13B

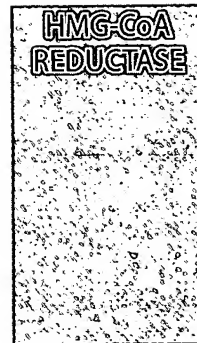


Fig. 13C

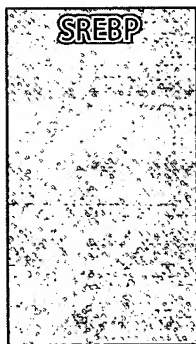


Fig. 13D

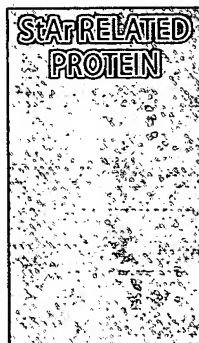


Fig. 13E

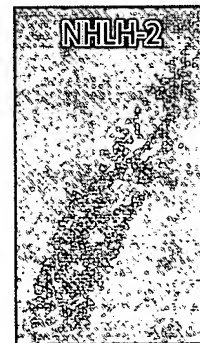


Fig. 13F